State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
P.O. Box 373
Honolulu, Hawaii 96809

ADDENDUM NO. 1
FOR
JOB NO. **DOASW01-B**
STATE IRRIGATION SYSTEM RESERVOIR IMPROVEMENTS PROJECT
KUALAPUU RESERVOIR (HI-00041), KUALAPUU, MOLOKAI, HAWAII

JUN 3 2010

This addendum as issued shall become part of the Contract Documents for the subject project. The plans and specifications shall be amended as follows:

PRE-BID CONFERENCE attendance sheet and minutes are attached.

SPECIFICATION
REPLACE the "Table of Contents:" and **ADD** Sections:

14600	GANTRY CRANE
100010	WAVE ATTENUATION

GEOTECHNICAL EXPLORATION & EVALUATION REPORT for Kualapuu Reservoir includes appendices of available record construction plans and record as-built drawings that the contractor may find informative in their bid preparation. CDs are available for pickup at the Engineering Division office, 2nd floor, Kalanimoku Building, Room 221, 1151 Punchbowl Street, Honolulu and at the Engineering Division Office, 130 Mahalani Street, Wailuku, Maui.

BRIAN KAU, P.E.
Administrator and Chief Engineer
Agricultural Resource Management Division
Department of Agriculture

Pre-Bid Meeting

DOASW01-B

State Irrigation System Reservoir Improvements Project

Kualapuu Reservoir (HI-00041), Kualapuu, Molokai, Hawaii

Date / Time : 24 May 2010 / 1:30 pm

Attendees: See attached sign in sheet

Items discussed:

1. SCOPE OF WORK: The work shall generally consist of furnishing and installing a permanent gantry crane for lifting spillway trash rack, vegetation and trees clearing on dam embankment slopes, rehabilitate eroded and overgrown upstream embankment slopes with fabric formed concrete revetment, installation of wave attenuation buoy, construction of channelized surface runoff control devices, installation of ground water level monitoring wells and embankment survey monuments and necessary appurtances complete in place.
2. CRITICAL DATES – Bid opening is 28 June 2010 (2 pm)
   Hawaii Products Preference Certification submitted by June 7, 2010
   Last day for a "Request for Information" (RFI) is 14 June 2010 (3 pm)
3. CONSTRUCTION TIME – 270 consecutive calendar days
4. POINT OF CONTACT for RFI's : Glenn Okamoto (808-973-1123)
   email address : glenn.m.okamoto@hawaii.gov
5. Please list all sub-contractors in the "Base Bid" and "Alternative Additive #1" tables. Please sign the P-13 (Acknowledgement of Examination of Site Provisions).
6. Bid proposal - We will delete line item #16 – Allowances. We will have an addendum with plans/specs/proposal updates out shortly.
7. BRIEFING SLIDES were presented during the pre-bid meeting.
8. We discussed with DLNR/Engineering Division/Dam Safety Section the permitting process for the project. **Our estimated Notice to Proceed (NTP) date for the project is December 2010.**

SIGN-IN SHEET

PRE-BID CONFERENCE
FOR

Job Number: DOASW01- B Date: 24 May 2010

Job Title: State Irrigation System Reservoir Improvements Project;
Kualapuu Reservoir (HI-00041), Kualapuu, Molokai, Hawaii

	Name	Company	Email Address	Phone
1	Alvin Satogata	DLNR/Eng Div	alvin.n.satogata@hawaii.gov	587-0271
2	Leonard Leong	ROYAL	leonard@royalcontracting.com	839-5006
3	Mark D. Inoshita	"	markie@royalcontracting.com	"
4	Mingi Sohn	Yogi Kwong	mingi@yogikwong.com	258-1232
5	James Kwong	Yogi Kwong Engineers	james@yogikwong.com	942-0001
6	Kealohi Sandefur	Yogi Kwong Engineers	kealohi@yogikwong.com	942-0001
7	Kevin Gooding	Oceanit	kgooding@oceanit.com	954-4189
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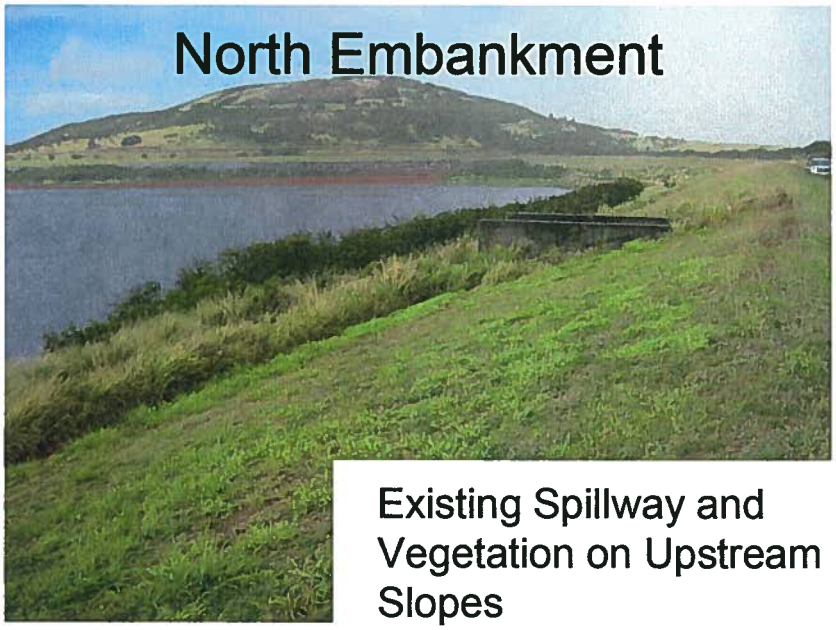
Meeting location – DLNR / Engineering (1:30 pm)



Existing Spillway and Vegetation on Upstream Slopes

North Embankment

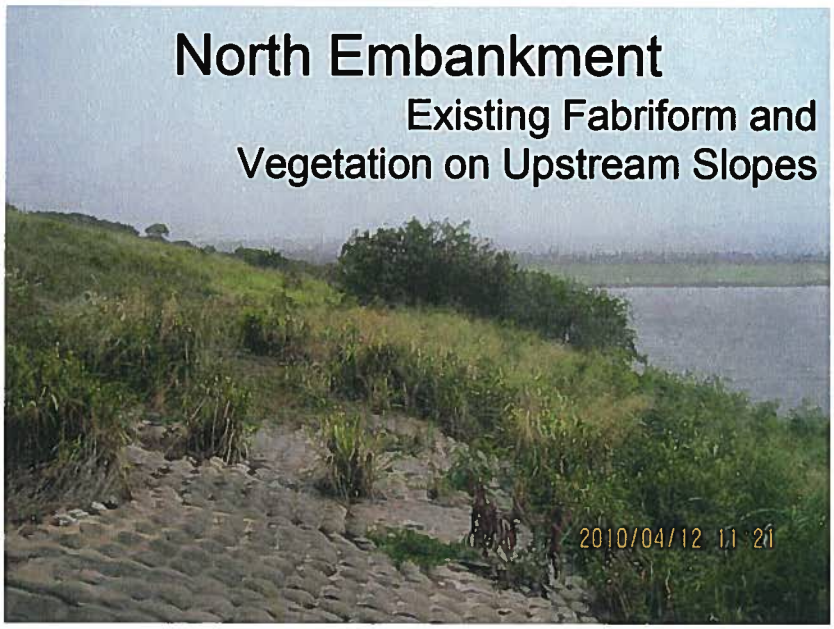
Vegetation on Upstream Slopes

North Embankment

Vegetation on Upstream Slopes

North Embankment

Existing Fabriform and Vegetation on Upstream Slopes



Spillway

To Construct New Spillway Gantry Crane

Spillway

To Construct New Spillway Gantry Crane

Spillway

To Construct New Spillway Gantry Crane

West Abutment

Overgrown Vegetation and Slope Scour

West Abutment

Overgrown Vegetation and Slope Scour

West Abutment

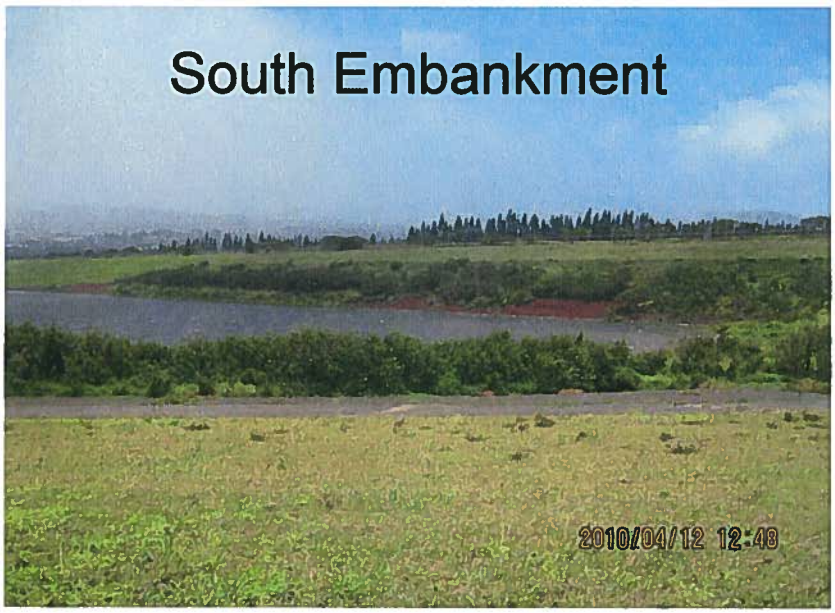
Overgrown Vegetation and Slope Scour

Overgrown Vegetation and Slope Scour

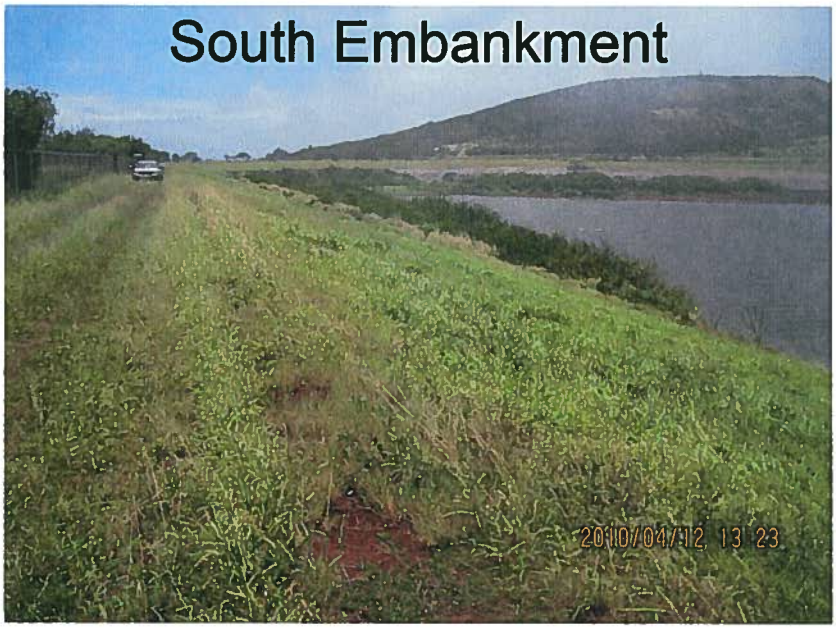
West Abutment

Overgrown Vegetation and Slope Scour

West Abutment



Overgrown Vegetation and Existing Fabriform

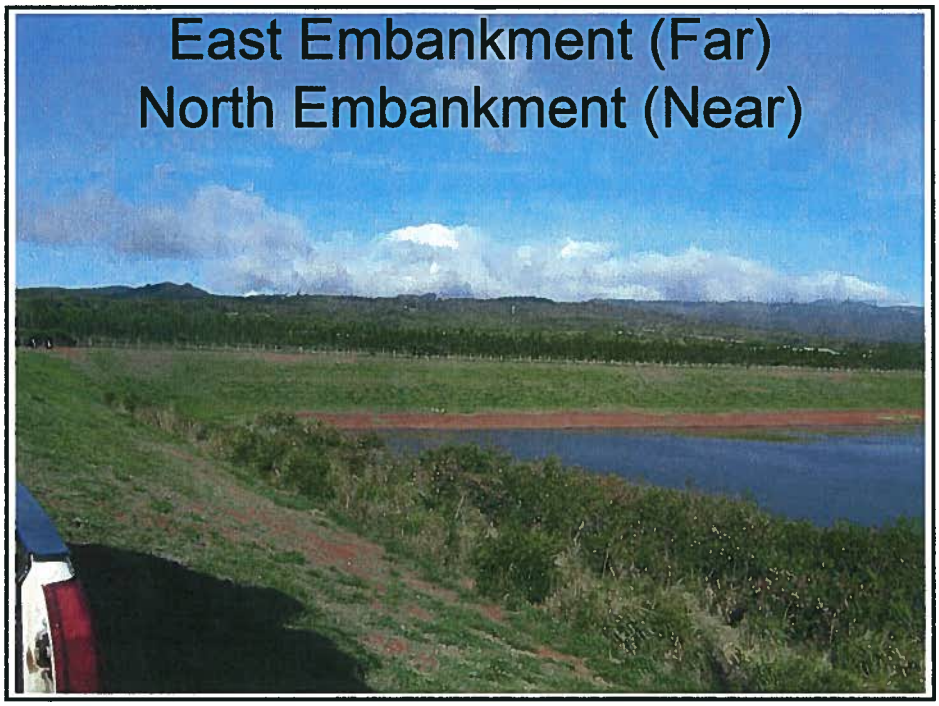


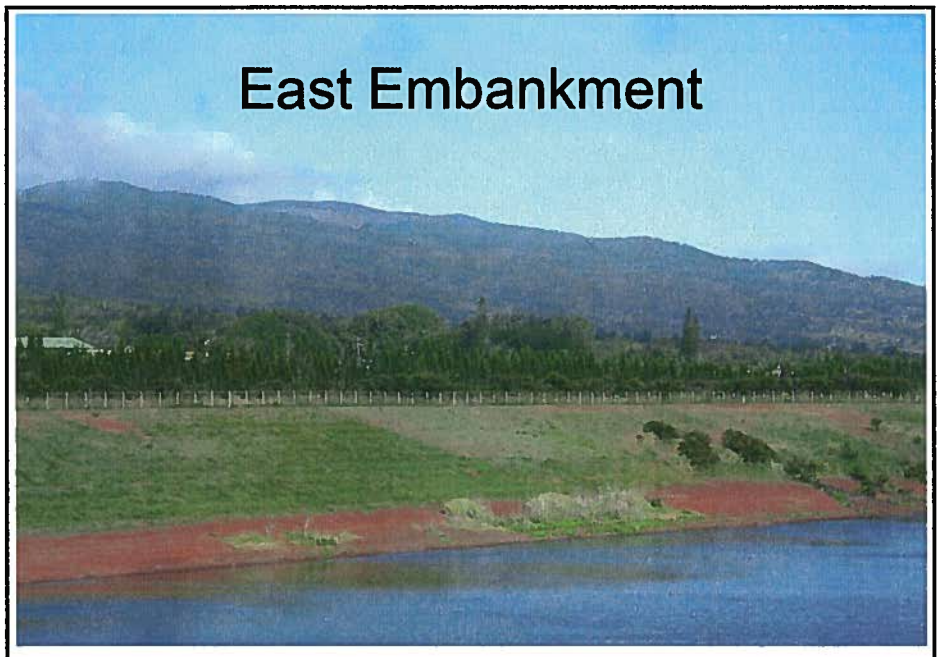
South Embankment

Overgrown Vegetation and Existing Fabriform

East Embankment

Sparse Overgrown Vegetation on Upstream Slopes



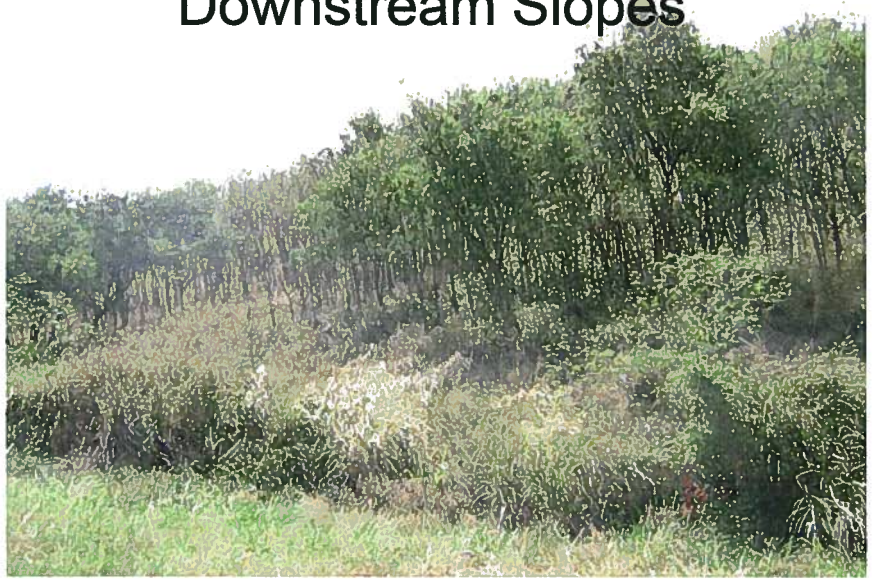


Sparse Overgrown Vegetation on Upstream Slopes

East Embankment

Sparse Overgrown Vegetation on Upstream Slopes

Overgrown Vegetation on Downstream Slopes




Overgrown Vegetation on
Downstream Slopes


Overgrown Vegetation on
Downstream Slopes


Downstream Slope


Overgrown
Vegetation on
Downstream Slopes

Table of Contents:

SECTION 100010 WAVE ATTENUATION
SECTION 15110 - SLUICE GATES
SECTION 15600 - STOP LOGS

SECTION 14600

GANTRY CRANE

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS: This section covers the requirements for furnishing and installing a gantry crane. The gantry crane shall be used to lift and lower the spillway trash gate as shown in the contract drawings. The entire gantry crane shall be furnished by a single entity. The manufacturer shall issue a warranty in accordance with section 3.2, Warranty and Guarantee.

A. The work includes furnishing all equipment and materials, providing all labor, supervision, administration and management; and supplying all construction equipment, materials and services necessary to perform the work as detailed in this specification.

B. A gantry crane is a lifting device used for the vertical lifting and lowering of a load with a hoisting mechanism with a bridge supported on two legs running parallel on fixed rails.

C. Submittals: Contractor shall submit proposed gantry crane drawings and specifications to the Engineer at least 60 days prior to the start of gantry crane mobilization for review and approval. The drawings and specification sheet shall give full details of minimum physical properties, and a certificate confirming compliance of the crane with the minimum specifications.

1. Shop Drawings: The manufacturer shall submit for approval to the Engineer after award of the contract, four (4) sets of full and complete shop drawings and manufacturers specifications.

2. Certificates: Certificates of compliance stating that the crane meets the requirements for the intended application shall be submitted prior to delivery. The crane manufacturer must satisfy by affidavit to the Engineer and Contractor, jointly, that the crane he offers to furnish shall meet in every aspect the requirements set forth in the specifications. The Contractor shall transmit to the Engineer the affidavit given him by the manufacturer or supplier prior to approval for the furnishing and installing of the crane.

PART 2 – PRODUCTS

2.1 MATERIAL SPECIFICATIONS

A. Gantry Crane

One (1) ton capacity floor mounted fixed height gantry crane with an inside leg span of ten (10) feet and ten (10) feet fixed underside height such as the Contrx GC-SP or

approved equivalent. The crane shall include galvanized fasteners, deck plates, and all other fasteners, hooks and bolts required for safe operation. The capacity labels shall be weather proof and UV-Resistant. The crane shall be constructed of carbon steel painted standard cat yellow. The crane shall be designed and have sufficient corrosion protection for standard outdoor use in Hawaii. The crane shall include a one (1) ton capacity beam clamp to be mounted in the center of the gantry bridge beam.

B. Chain Hoist

A one (1) ton capacity (working load limit) hand chain hoist with twenty (20) feet of lift shall be furnished. The chain hoist shall be attached to the beam clamp. The hand chain hoist shall be designed and have sufficient corrosion protection for standard outdoor use in Hawaii. The chain hoist strength shall meet or exceed minimum 4:1 design factor and all requirements of ASME/ANSI Standard B-30.16. The chain hoist shall be manufacturer tested at 125% of rated load.

C. Bridle and Fasteners

A lifting bridle shall connect the chain hoist to the spillway trash gate. The chain for the bridle shall be galvanized Grade 80 with a working load limit (WLL) of at least one (1) ton (2000 lbs). All other fasteners and hooks shall be galvanized and have a WWL of at least one (1) ton.

PART 3 -EXECUTION

3.1 EXECUTION AND WORKMANSHIP

A. The Contractor shall be responsible for inspection of the delivered crane at the job site. Should the crane show damage from transit, it shall be so identified by the Contractor and upon approval by the Engineer be either repaired or replaced.

B. The crane shall be installed according to the manufacturer's recommendations on concrete footings as shown in the contract documents with corrosion resistant lag bolts.

C. The beam clamp shall be installed centered above the spillway trash guard. The beam mounted chain hoist shall be attached to the beam clamp. The chain bridle shall attach the chain hoist to outer edges of the spillway trash guard.

3.2 WARRANTY AND GUARANTEE

The manufacturer shall warrant the crane against defects in materials and workmanship for a period of one year from the day of acceptance by the State of Hawaii. In the event of defects in materials or workmanship, the manufacturer shall agree to furnish the same or substantially similar replacement part (new or repaired) free of charge, F.O.B. work site.

3.3 AS-BUILTS: The Contractor shall provide as-built drawings of the crane.

3.4 MAINTENANCE AND INSPECTION INSTRUCTIONS: The Contractor and manufacturer shall provide a maintenance and inspection handbook describing in detail the necessary precautions and procedures the State of Hawaii will be required to perform to satisfy applicable crane safety requirements and the requirements of the Contractors and manufacturer's Warranty.

PART 4 – METHOD OF MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

A. The furnishing and installing of the gantry crane shall not be measured directly but shall be part of a lump sum bid as listed in the Bid Proposal Form.

4.2 PAYMENT

A. Payment shall be full compensation for furnishing all equipment, tools, materials, labor, other required items, tests, and incidentals required to complete the Work in-place complete.

END OF SECTION

SECTION 100010 WAVE ATTENUATION

1.0 PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

A. This section covers the requirement for furnishing and installing of the anchored buoy-type wave attenuation breakwater system.

1.2 SUBMITTALS

The following shall be submitted in accordance with Section 01300, Submittals.

A. Certification:

1. The Contractor shall provide the Engineer a certificate stating the name of the wave attenuation system manufacturer, product name, style and other pertinent information to fully describe the system.

2. The contractor shall provide a manufacturer's written certification stating that the furnished wave attenuation system meets or exceeds all requirements of this specification. The certification, upon request, shall be accompanied by the manufacturer's quality control program and supporting data.

3. The Manufacturer is responsible for establishing and maintaining a quality control program to assure compliance with the requirements of the specification. Documentation describing the quality control program shall be made available upon request.

2.0 PART 2 - PRODUCTS

2.1 MATERIALS

A. An anchored floating buoy breakwater system shall be used. The wave attenuation breakwater system shall be the WaveEater Model 3636 or approved equal.

B. The anchored wave attenuation system shall be capable of operating in depths from 10 to 45 feet deep.

C. The wave attenuation system shall be designed to attenuate 75% of the wave energy for the following reservoir wave conditions:

1. Wind speed = 20 mph

2. Fetch length = 0.29 mile

3. T (Period) = 1.25 seconds

4. L (Wavelength) = 2.439 m = 8.0 feet

5. H (Height) = 0.5 feet

3.0 PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

A. The wave attenuation breakwater system shall be installed according to the Contract Documents and the manufacturer recommendations.

4.0 Part 4– METHOD OF MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

A. The cost and work covered by this section shall be measured by the lineal feet of wave attenuation system furnished and installed in place complete.

4.2 PAYMENT

A. Payments shall be made at the prices bid for the various items of bid as listed in the Bid Proposal Form. Payment shall be full compensation for furnishing all equipment, tools, materials, labor, other required items, services, tests, and incidentals required to complete the Work in-place complete.

END OF SECTION